Interpreting data of a repeated sprint test #54

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Alterations in performance are often quantified through physical tests. However, although frequently used there are a few discussions about the reliability and interpretation of their results. The purpose of this study was to verify the reliability of a new method to access the repeated sprint ability denominated Labex-Test (LT) as well as analyzing the effect of 10 weeks of systematized training in soccer players' performance. LT consists of an uncertain number of sprints of 30m until a fall of performance of 10% is observed in relation to its initial speed. All the sprints are intercalated with 20 seconds of active recovery and monitored by a set of photocells placed at each 6 m. The variables analyzed through LT were initial speed (mean speed of the first 30m sprint), initial acceleration (first 6m) and the number of sprints. Twelve soccer players aged 17.2±0.4 years participated of this study. Two sets of 3 tests were accomplished, with intervals of 48 hours, one before and the other at the end of the 10 weeks of training. LT detected increase of the initial speed and of the initial acceleration in 79% and 64% of the tests, respectively. On the other hand, there was a reduction of the sprints number in 79% of the tests. The same variables presented average and standard deviation of 7.30±0.22 m/sec; 8.96±0.85 m/sec and 4.98±1.61 sprints before and 7.60±0.30 m/sec; 9.87±0.90 m/sec and 4.10±1.11 sprints after the training period. LT has shown to be sensitive for the three studied variables.

Key words: reliability; repeated sprint ability; training; soccer, acceleration.